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AUTHOR Inkelas, Karen Kurotsuchi
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ABSTRACT

This study examined personal and collegiate influences on Asian Pacific American college students' attitudes toward three racial/ethnic diversity issues. The study's organizing framework was a combination of Astin's I-E-O (inputs, environments, and outputs) model and Weidman's model of undergraduate socialization. Data were drawn from a longitudinal study of undergraduates at a large Midwestern research university and included responses from 184 Asian Pacific American students who responded to surveys in both fall 1990 and winter 1994. The study examined students' racial attitudes in three areas: (1) affirmative action principles, (2) affirmative action practices, and (3) existence of discriminatory inequality. Chi-square distributions and multiple regression analysis revealed that gender, academic major, sponsored academic programming, and perceptions of the racial climate affected Asian Pacific American students' attitudes toward affirmative action and perceptions of inequality. Tables and an appendix provide detailed analysis of the results. (Contains 55 references.) (DB)

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INCREASING VISIBILITY: THE RACIAL ATTITUDES OF ASIAN PACIFIC AMERICAN STUDENTS

KAREN KUROTSUCHI INKELAS
UNIVERSITY OF MICHIGAN, ANN ARBOR

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Comments are welcome and can be sent to any of the following:

Karen Kurotsuchi Inkelas
University Housing
515 East Jefferson Street
1500 Student Activities Building
Ann Arbor, MI 48109-1316
Email: kkuro@umich.edu
Phone: 734.647.4772
Fax: 734.763.2313

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INCREASING VISIBILITY:
THE RACIAL ATTITUDES OF ASIAN PACIFIC AMERICAN STUDENTS

ABSTRACT

Through a conceptual framework that combines racial attitude theory from the fields of higher education, sociology, and psychology, this study examines personal and collegiate influences on Asian Pacific American students' attitudes toward three racial/ethnic diversity issues. Data is drawn from a longitudinal study of undergraduates at a large Midwestern research university from 1990-1994. Chi-square distributions and multiple regression analyses reveal that gender, academic major, sponsored academic programming, and perceptions of the racial climate affect Asian Pacific American students' attitudes toward affirmative action and perceptions of inequality.

As the 20th century draws to a close, race continues to be one of the most explosive issues in American higher education (Altbach, 1991). Over the past four decades, the issues of race and students' attitudes regarding multiculturalism and/or diversity have attracted widespread attention in both the popular media and scholarly exchange. Yet, the voices of Asian Pacific Americans, one of the fastest growing minority groups in American colleges and universities (Escueta & O'Brien, 1995), have been noticeably absent from these conversations in both the public and academic realms. Instead, Asian Pacific Americans (APAs) are often overlooked in research and dialogue concerning students' racial attitudes.[1]

Largely due to the legacy of institutionalized discrimination against African Americans, naturally, much of the focus on racial attitudes in higher education was given to Black/White

[1] In this inquiry, the term "Asian Pacific Americans" includes all Americans of Asian or Pacific Island descent, but does not consist of individuals living in Asian countries or students from Asia only temporarily studying in the United States. While the term "racial attitudes" can be viewed as any attitudes, opinions, or views related to issues concerning matters of race, racial/ethnic diversity, or multiculturalism, for the purposes of this paper, "racial attitudes" shall be defined as attitudes toward affirmative action principles, affirmative action practices, and perceptions about discrimination and inequality in the United States.

student relations. Only recently has research on race in higher education begun to include the views of students from other racial/ethnic groups--namely Asian, Latino, and Native American students (for example, Astin, 1993; Cabrera & Nora, 1994; Hurtado, 1992; Schaefer, 1987; White & Sedlacek, 1987). The results from these ground breaking empirical studies, however, have shown that the racial attitudes of students from non-Black minority groups are dissimilar to those of White *or* African American students, and that the factors that influence students' opinions vary by race/ethnicity as well.

Despite the ascendancy of recent research that examines the college experiences of racial/ethnic groups other than White and Black Americans, Asian Pacific Americans (APAs) still remain an understudied minority group in higher education. The views and experiences of Asian Pacific Americans are seldom studied in-depth and often discussed only in comparison to findings regarding other racial/ethnic groups (Yonezawa & Antonio, 1996; Osajima, 1991). This omission has prompted several scholars (e.g., Hune & Chan, 1997; Osajima, 1995) to allege that Asian Pacific Americans are the "invisible" population in American higher education. This invisibility, the critics argue, is based in part upon the fact that APA students are perceived to be the "model minority," a racial/ethnic group that does not require special attention since they seem to be succeeding at high rates with little support or assistance (Osajima, 1995; Hune & Chan, 1997). Yet, because they require little attention, APA students also end up receiving little attention--in racial dialogues and elsewhere (Osajima, 1995).

Therefore, in order to fill the relative void of research on Asian Pacific Americans in higher education and strengthen their "visibility" in the discourse on race, this study seeks to examine the racial attitudes of Asian Pacific American college students and the personal characteristics and facets of the college experience that influence their attitudes. Through an

analysis of a four-year longitudinal study of college students, this study will explore the intersection of three bodies of research--racial attitude, racial/ethnic identity, and college impact theory--and seeks to advance knowledge on Asian Americans in each of these three domains.

Significance of the Study

Understanding the influence of social and collegiate factors on Asian Pacific American students' racial attitudes will be beneficial to higher education research and policy, and it will make a significant contribution to race relations scholarship. Given that APA enrollment in higher education has risen over 400 percent in the past 20 years and that APA students comprise significant percentages of a number of college student bodies[2] (Escueta & O'Brien, 1995; Academe Today, 1998), knowledge about the racial attitudes of Asian Pacific American students in campus racial discourses is of crucial importance if campuses hope to promote their diversity goals and missions. Moreover, Asian Pacific Americans are now the country's fastest growing racial/ethnic group, and, when this fact is coupled with Current Population Survey data revealing that APAs are more likely than any other racial/ethnic group to have attended at least 4 years of college by the age of 25 (Escueta & O'Brien, 1995), one can fairly assume that high APA college enrollment trends will continue into the 21st century. Thus, higher education institutions could use knowledge about Asian Pacific American students' racial attitudes to create useful and appropriate curricular and co-curricular programming designed to foster racial tolerance and understanding.

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[2] APA students currently represent a sizable portion of several college campuses; for example, they comprise 51 percent of the undergraduate population at UC Irvine, 35 percent at UC Berkeley, 29 percent at MIT, and 27 percent at the University of Chicago (Academe Today, 1998).

The larger society would be better able to understand this somewhat "invisible" portion of the population and the special contributions that a college environment can have on students' values and beliefs. Because this study makes use of several social science theories originally investigated with largely White-only samples, this study will examine whether or not these theories are applicable to an American *minority* group. However, this study seeks not only to define how these theories work independently to affect APA students' racial attitudes, but also how these theories intertwine in the complex arena of race relations. By utilizing a conceptual framework that incorporates a variety of empirical insights from several different social science disciplines, this study links literature that has not been used previously in concert to explore the influences of a multi-faceted racial context on a unique but significant population in American society.

This integrated look at the stimuli of APA college students' racial attitudes is crucial not only in order to shed light on an understudied racial/ethnic group but also in terms of its implications in an increasingly multicultural American society. Demographic forecasters predict that in the 21st century, one-third of the American workforce will be composed of racial/ethnic minorities, and most jobs in the new century will require an education beyond a high school diploma (Justiz, 1994). With such a diverse society on the horizon, the roles of colleges and universities will become even more pivotal in shaping the economic health of the American economy. Indeed, 94 percent of registered American voters in a recent study felt that it is extremely important for all Americans to better understand people who are different than themselves, and two in three agreed that colleges and universities should prepare people to function in a diverse society (American Association of Colleges and Universities, 1998). Thus, a college education will continue to serve as a critical juncture for enhancing racial understanding.

And, with Asian Pacific American college enrollments growing at continually rapid rates, it becomes essential that this population's views on racial issues be examined and understood.

Review of Literature

Colleges have long been believed to play a key role in the fostering of certain values and behaviors. A large volume of higher education literature studying the impact of college on students' racial attitudes has concluded that several facets of the college environment have an effect on students' views on race and that, in some cases, the effects can be long-term (see, for example, Astin, 1993; Pascarella & Terenzini, 1991; Hyman, Wright & Reed, 1975).

College Impact Theories

Several theoretical models in the higher education literature propose to explain how students change as a result of their interaction with different college environments (e.g., Astin, 1993; Tinto, 1993; Weidman, 1989; Pascarella, 1985). The Astin I-E-O model has been used for over three decades in the study of college student change and development, no doubt due in large part to its simplicity and flexibility. In this framework, "outcomes," or student characteristics after exposure to college, are thought to be influenced both by 1) "inputs," or student characteristics before and at time of entry to college, and 2) "environments," or various programs, policies, faculty, peers, and educational experiences that students interact with while in college (Astin, 1993).

The Weidman (1989) conceptual model of undergraduate socialization is probably the most comprehensive college impact model designed specifically to examine *affective* outcomes such as students' racial attitudes. As does Astin (1993), Weidman posits that student outcomes are influenced both by students' college experiences and their personal characteristics. Yet, the undergraduate socialization model differs significantly from the I-E-O model with the incorporation of two unique "inputs": the influences of parental or family socialization and non-

college reference groups. Weidman (1989) emphasizes that parents, families, peers, schools, and communities may also be a guiding influence on students prior to college, and these influences may persist during students' years in college. He adds that the support of non-college significant others, such as friends, relatives, and churches, has been found to be important for minority students (Thomas, 1981; Nora, 1987, in Weidman, 1989).

The Astin I-E-O and Weidman undergraduate socialization models are ideal for this study in that they purport to measure the impact that the college environment has on students' racial attitudes, but they also take into account pre-college factors that may bear an influence on students' attitudes. No doubt, most students enter college with certain racial attitudes and personal beliefs, which are often influenced by sources--such as their parents, peers, communities, the media, etc.--prior to college entry. This study, therefore, utilizes the Astin I-E-O model and an adapted form of the Weidman undergraduate socialization model as the conceptual frameworks that link together theories from several different disciplines into one cohesive model. This model will be elaborated in greater detail in the next section of the paper.

Asian Pacific American Students' Racial Attitudes

Despite a plethora of studies examining college students' racial attitudes using college impact models (see, for example, Astin, 1993; Hurtado, 1992; Allen, 1986; Pascarella et al, 1996; Milem, 1992; Springer et al, 1996), very little research has been conducted on *Asian Pacific American* college students' racial attitudes. Indeed, most studies with data on APA students' racial attitudes focus on affirmative action and canvas the attitudes of several different racial/ethnic groups, of which Asian Pacific Americans are but one group. For example, in a nationally representative sample of first year college students, Sax & Arredondo (1996) found that 50 percent of Asian Pacific American freshmen agreed that affirmative action in college

admissions should be abolished, in comparison to 58 percent of White, 23 percent of African American, and 38 percent of Mexican American students. However, a much smaller percentage (29 percent) of APA students in the national sample thought that no special consideration should be given to African Americans in admissions decisions.

Other researchers have also found that Asian Pacific American students' reactions to affirmative action in college admissions decisions are not unequivocally positive or negative, but vary according to context (The Michigan Study, 1997; Fukurai et al, n.d.). Moreover, a study of University of California at Berkeley students' opinions on diversity concluded that Asian American students "were the most conflicted" of all the racial/ethnic groups of students regarding the diversification of the student body (Institute for the Study of Social Change, 1991, p. 15). The authors described Asian American students' opinions on racial/ethnic diversity issues such as affirmative action as "subtle," and argued that opposition to affirmative action on of the part of some APA students was more "complex than (it) first appear(ed) on the surface" (p. 27).

Some may argue that these differences in APA students' opinions are contradictory or even the result of ignorance. However, the differences in Asian Pacific Americans' attitudes may intimate that their opinions concerning racial issues like affirmative action are couched in a unique perspective that is similar neither to the opinions of White nor African Americans. By incorporating some of the constructs regarding Americans' racial attitudes introduced in the social science literature, this study attempts to interpret some of the complexities found in the racial attitudes of Asian Pacific American students.

Contributions to Racial Attitude Theory from Social Science Disciplines

In light of the lack of substantial empirical inquiry into the racial attitudes of Asian Pacific American students, perhaps the best way to begin an investigation into differences in Asian Pacific

Americans' racial attitudes is to identify the ways in which social scientists have explored the motivations behind *other* Americans' racial attitudes. The dominant forces behind racial attitude theory in the past four decades have been research in the sociological and psychological disciplines. These theories, like the higher education literature, have not focused explicitly on the attitudes of Asian Pacific Americans, but have been inferred to be applicable to APAs in light of certain contexts (Sax & Arredondo, 1996; Cheng & Espiritu, 1989; Serafica, 1992).

Perhaps the most basic of the sociological theories interpreting why Americans hold certain racial attitudes is related to conflicts they perceive with their own self-interests. The self-interests theory argues that hostilities between members of two or more different racial groups arise from conflicts over material interests and scarce resources, which result in status imbalances, superior and inferior power relationships, and real and perceived competition (Bobo, 1983; Blalock, 1967). Thus, a self-interests theorist would not be surprised to find that APA students in a recent national study of college students who were not attending their first choice college were more likely to oppose affirmative action in admissions decisions (Sax & Arredondo, 1996), since the self-interest implication is that they may have felt that their chances for admission in their school of preference (or "scare resource") were thwarted by affirmative action policies.

Kluegel & Smith (1986) contend that White Americans (and perhaps Asian Pacific Americans as well, although they did not study APAs) may also tend to oppose race-targeted programs like affirmative action because of an abiding personal conviction in a construct called the dominant ideology. Kluegel & Smith (1986) assert that the majority of White Americans subscribe to a dominant ideology in which they believe that--regardless of racial heritage--opportunity and success are abundant in America, and dreams can be obtained through hard work and merit. Thus, the way for minority groups to achieve economic and social parity is not

through redistributive processes like affirmative action but through sweat, determination, and training.

Other researchers have found that racial minority groups, especially African Americans, may express mixed support for the dominant ideology (e.g., Hochschild, 1995). To this date, there has not been much research on Asian Pacific Americans' beliefs in the dominant ideology. In a study examining the Black-Korean conflict and the lack of conflict between Koreans and Mexicans in Los Angeles, Cheng & Espiritu (1989) noted that foreign-born Koreans and Mexicans are likely to share an "immigrant" ideology of America as the land of opportunity, since they often left their home countries to expand their economic and social opportunities. In addition, several authors have noted that APA students state that education is the primary pathway to economic and social mobility, thus suggesting that they subscribe to at least that aspect of the dominant ideology (Institute for the Study of Social Change, 1991; Kurotsuchi Inkelas, 1997; Osajima, 1991).

So, if it is true that Asian Pacific Americans have a strong belief in the dominant ideology, this belief may lead to negative attitudes toward racial policies such as affirmative action. APA students, who have been found to have met the greatest number of selective college entrance criteria among their racial/ethnic peers[3] (Owings, McMillen, Burkett, 1995), may feel that academic achievement and college preparation serve as the merits that earn admission to highly selective colleges, and not personal characteristics such as one's racial/ethnic background.

Just as the self-interests and dominant ideology theories focus on the self in relation to

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[3] The criteria for selective college admissions identified in the Owings et al (1995) study were: 1) high school grade point average of 3.5 or higher; 2) SAT score of 1100 or higher; 3) a full college preparatory curriculum taken in high school; 4) positive teacher evaluations; and 5) two or more extra-curricular activities participated in while in high school.

others, the field of psychology offers a similar and interesting new development in racial attitude theory which involves the hypothesized relationship between an individual's racial identity and his/her racial attitudes. Generally, racial identity development has been described as a process of internal discovery and awareness of one's ethnic culture and heritage (e.g., Cross, 1990; Helms, 1990; Atkinson, Morten & Sue, 1989), but new scholarship has drawn parallels between people's feelings about their own identity and their feelings about others. For example, both Cross (1990) and Atkinson et al (1989) theorize that racist attitudes are most likely to occur within individuals who are highly ethnocentric, while others have speculated that individuals with a more multicultural and culturally-embracing identity are more likely to exhibit greater racial acceptance and positive racial attitudes (Carter, 1990; Glisan, 1992).

Serafica (1992) wrote that racial/ethnic identity development may certainly have an impact on the racial perceptions of Asian Pacific American adolescents, but that this area of research has not yet been systematically explored. Yet, Atkinson, Morten & Sue (1989) argue that Asian Pacific American racial identity develops in similar phases to that of other racial/ethnic minority groups, in that the process begins with a lack of ethnic consciousness, followed by an "immersion" in ethnocentrism, and culminating in a more embracing or multicultural worldview. Since this pattern is consistent with other racial identity development models (especially the Cross (1990) development model for African Americans) it follows that Asian Pacific Americans in the ethnocentrism stage may hold negative racial attitudes about people from other racial/ethnic groups, and that positive attitudes may be associated with a more multicultural identity.

The Influence of the College Environment on Students' Racial Attitudes

Using college impact theory, several higher education researchers have studied the properties of the college environment that seem to bear an influence on students' racial attitudes. Yet, these studies often operate with different definitions of racial attitudes, which make their

interpretability for this study less clear. Nevertheless, the findings from these studies show that there are certain aspects of the college environment that bear a relationship to students' attitudes toward several types of racial views or behaviors, and thus these studies are informative for this study's purposes.

Several studies have associated increased commitment to various racial issues, attitudes, and behaviors with student involvement in university-sponsored diversity programs and activities, such as racial/cultural workshops or ethnic studies courses (Antony, 1992; Astin, 1993; Hyun, 1993; Pascarella et al, 1996; Springer et al, 1996; Hurtado, Dey & Trevino, 1994). Recent studies have also validated a relationship between specific academic majors--such as those students with majors other than mathematics, science, or business or students who have taken ethnic studies course patterns--and more liberal racial attitudes (Milem, 1992; Astin, 1993; Muir, 1989; Pascarella & Terenzini, 1991).

Participation in extra-curricular activities also seems to have an impact on students' racial attitudes. Three studies using data from a national longitudinal survey of college student experiences revealed that students who socialized with someone from another racial/ethnic group were more likely to have liberal racial attitudes (Milem, 1992; Antony, 1992; Astin, 1993), and Hurtado (1990), using the same data, found that the time students spent in ethnically-focused student groups and organizations was positively associated with increased commitment to the promotion of racial understanding.

Finally, students' *perceptions* about their campuses may be just as influential as the actual structures of their environments and experiences. Several studies indicate that minority students at predominantly White institutions hold strongly negative perceptions about their campuses' racial climates (see for example, Hurtado, 1992; Cabrera & Nora, 1994; Nora & Cabrera, 1996;

McClelland & Auster, 1990), and that these negative perceptions of the environment affect these students' racial attitudes (Hurtado, 1992; Hurtado, 1994).

As the results of this literature review suggest, it seems that racial attitudes are not influenced by one single factor, but a myriad of several different factors. Thus, this study seeks not to exclude some interpretations in favor of others, but instead attempts to combine several theories into one framework in order to examine the influence of all the factors as they interplay simultaneously in the formation of Asian Pacific American students' racial attitudes.

Conceptual Model

The theoretical and empirical insights from the higher education, sociology and psychology literatures reviewed thus far have never been used in concert to study the racial attitudes of Asian Pacific Americans, and most likely have not been combined heretofore in a college impact examination of students' racial attitudes. Thus, this study can be thought of as an exploratory deductive design (Creswell, 1994), where theories advanced in separate paradigms are fused together into one organizing framework in order to test whether the theories are confirmed or disconfirmed for one racial/ethnic group in particular: Asian Pacific American students.

The central organizing framework for this study is a combination of the I-E-O (Astin, 1993) and Weidman undergraduate socialization (1989) models. The independent variables, or "inputs," of the model include students' demographic characteristics, such as: 1) gender (Allen, 1986; Qualls, Cox & Schehr, 1992); 2) what Weidman (1989) terms "parental socialization" (i.e., parents' education level, generation status in the U.S., and primary language spoken at home); and 3) the influence of "non-college reference groups" such as high school peers. Peer influence in this study is measured via the predominant racial composition among the respondent's six high

school friends. In addition, as defined in the sociological and psychological literatures, students' personal beliefs and identification--such as their perceived self-interests, belief in the dominant ideology, and the extent to which their APA racial identity is a salient part of their lives--are operationalized as "inputs" in this study's conceptual model.

The "environments" portion of the model will include those aspects from the higher education literature which have been found to have an influence on other students' racial attitudes, including: students' majors; their exposure to University-sponsored diversity activities; their ethnic student group involvement; their social interactions across racial/ethnic groups; and their perceptions of the climate for cross-race interaction. In this model, students' majors are represented by dichotomous measures: "social sciences," "science/engineering," and "business." ("Arts and humanities" majors serve as the referent category.) Ethnic student group involvement is measured by students' self-reported level of involvement with groups with an Asian Pacific American focus or theme. Finally, exposure to University-sponsored activities and perceptions of the climate for cross-race interactions are composite measures created via factor analysis; for more information on the formation of these scales, refer to Table A-1 in the appendix.

These personal and collegiate constructs have been integrated into a cohesive conceptual model to study the racial attitudes of Asian Pacific American students, as illustrated in Figure 1.

Insert Figure 1 about here

The racial attitudes (dependent variables) of interest in this study involve two measures of Asian Pacific American students' attitudes toward affirmative action and another measure evaluating APA students' views regarding the status of American racial relations. All three dependent measures are composite variables derived via exploratory factor analysis (see Table A-

1) and confirmed by prior racial attitude literature. As noted in the review of literature, previous research on APA students' attitudes toward affirmative action has been somewhat conflicting, with APA students recording somewhat strong opposition to the use of affirmative action in college admissions decisions, but registering support for opportunities for the disadvantaged in a general sense (Sax & Arredondo, 1996; Institute for the Study of Social Change, 1991; Kurotsuchi Inkelas 1997). What these results may imply is that Asian Pacific Americans differentiate between their support for the *principles* of affirmative action versus the *practices* of affirmative action.

In order to test whether APA students do hold different opinions on the dual purposes of affirmative action, two different affirmative action dependent measures will be analyzed. One measure relates to APA students' beliefs on whether or not higher education has a responsibility to promote increased equity and opportunity for diverse students, and the other evaluates APA students' opinions on the way in which affirmative action may be carried out on college campuses in order to promote diversity goals. The two affirmative action composite measures created for this study are:

Affirmative Action Principles (α = .675)	Factor Loading
Continued racial and ethnic discrimination within higher education requires that universities aggressively remove institutional barriers that promote inequality	.611
By including multicultural perspectives in the curriculum, universities are fulfilling the real purpose of higher education	.578
Colleges and universities should not provide resources to support educational, cultural, and social activities run by different groups of color (reverse coded)	.550
Despite our concern over racial injustice, colleges and universities do not have a primary responsibility to correct the situation (reverse coded)	.440

Affirmative Action Practices (α = .759)	Factor Loading
Different admissions criteria with respect to SAT and ACT scores may be justified for some students of color	.788
A high priority should be given to see that students of color receive financial aid for education after high school	.693
In the long run, a greatly increased enrollment of students of color will enhance the excellence of universities	.681
The hiring of more faculty of color should be a top priority of this University	.542

The third and final outcome measure in this study concerns APA students' racial attitudes that are broader in focus than the affirmative action issue, and center on their attitudes about the status of American racial relations. The construct measures whether or not APA students believe that discrimination and inequality still exist in today's American society:

Existence of Discrimination/Inequality (α = .756)	Factor Loading
Most people of color are no longer discriminated against in this country	.743
A person's racial background in this society does not interfere with achieving everything he or she wants to achieve	.717
In the generation since the Civil Rights Movement, our society has done enough to promote the welfare of people of color	.717
Anti-Semitism in America is a thing of the past	.673
The system prevents people of color from getting their fair share of the good things in life, such as better jobs and more money	.604
In the United States, there are still great differences between social levels--what one can achieve in life depends mainly on one's family background	.555

This measure can help elucidate the differences in Asian Pacific American students' opinions between a specific type of racial policy (such as affirmative action) and their general views about racial discrimination or inequality. Previous research has found that White Americans tend to support racial equality and integration in a general sense, but usually oppose more specific policy measures designed to achieve equality and integration, such as busing to desegregate K-12 public schools or race-targeted programs in employment or higher education (Bobo, 1983; Kluegel & Smith, 1986; Jackman & Muha, 1984; Kinder & Sears, 1981). The inclusion of a dependent measure representing attitudes toward the status of American race

relations will enable us to learn whether APA students' opinions toward racial equity in a "macro" sense and affirmative action in a "micro" sense are related or are dissimilar. Table A-1 in the appendix provides a complete description of all the composite measures utilized in this study.

Sample and Methods

Data and Sample

The data used in this study stems from a longitudinal survey of undergraduate students' expectations and experiences with multiculturalism and diversity at a large public research university in the Midwest. The survey followed the experiences of the class of 1994, and was executed in four waves: at the beginning of the Fall term of 1990, in the Winter term of 1991, in the Winter term of 1992, and in the Winter term of 1994. The sample for the Entrance survey (Fall term 1990) was n=2,600, yielding a 57 percent response rate. Subsequent waves of the survey (response rates ranging between 52 and 73 percent) were administered to all students of color and a large representative sample of White/Caucasian students in the class of 1994.

Between 181 and 259 Asian Pacific American students responded to each wave of the survey, with response rates ranging from 55 to 75 percent. The largest longitudinal matched sample of Asian Pacific American respondents in the study were APAs who participated in the Fall 1990 and Winter 1994 sample (n=184). Thus, in order to capitalize on the longitudinal strength of the survey but also maintain as much statistical power as possible, the 1990 and 1994 matched sample was chosen for the multivariate portion of this study.

The Asian Pacific American sample in this study may reflect the uniqueness of the APA community in this region of the country. There are seven identified Asian ethnic groups represented in the sample: South Asian (24%); Chinese (16%); Korean (15%); Filipino (15%); Taiwanese (8%); Japanese (3%); and Vietnamese (2%). (Seventeen percent of the APA

respondents did not indicate their ethnic origin.) Because this university does not collect information on the ethnic origins of their Asian Pacific American students, there is no way to determine the representability of this sample in relation to the entire campus community.

While nearly the entire Asian Pacific American sample is composed of U.S. citizens (99 percent), 62 percent of the APA respondents are the first generation in their families to be born in the United States, and nearly 30 percent are naturalized citizens. Nearly one-third come from bilingual or non-native English speaking homes. Yet, these APA students with recent immigration histories did not grow up in Asian ethnic enclaves: nearly 80 percent of the APA students in the sample indicated that their home communities were mostly or all White in makeup. Thus, when many Asian Pacific American students first arrive on this campus and interact with a student body composed of one-third students of color, it may be the first time these students encounter such racial/ethnic diversity--including a diversity of Asian Pacific American students as well.

Method of Analyses

The methodological analysis in this study consists of three parts: data preparation, descriptive analyses, and multivariate analyses. As a preliminary step, several original variables were reverse coded so that positive or "high" responses were of the highest value in all cases. All nominal data were transformed into dichotomous measures and one category was taken out of the multivariate analyses and used as the referent category. Because of the limited number of cases available for the study, all missing data in the independent variables--with the exception of background characteristics--were assigned mean substitutions. However, very little of the actual data was meansubstituted, since the greatest amount of missing data for any one item in the model was seven percent. The last step of the data preparation involved the creation of several composite variables as a method of data reduction. Principle components factor analysis with

orthogonal rotation were utilized to create several scale items in the analysis, including the three dependent variables. All the scale measures in this study have an eigenvalue of greater than 1.0 and alpha reliabilities of .631 or higher. (See Table A-1 for a full listing of all the factor scales, loadings, and reliabilities.)

The results of this study are informed through a series of descriptive and multivariate analyses. The descriptive analyses include chi-square crosstabulations and comparisons across survey waves. In order to examine whether Asian Pacific American students' views are unique, their responses are compared to those of students from other racial/ethnic groups. The multivariate analyses consist of three ordinary least squares regression equations, one for each outcome measure specified in the conceptual model. The independent variables were entered into the regression equation in five discrete blocks, with the organization of the blocks based on their relationship to the Astin I-E-O and Weidman undergraduate socialization models (see Figure 1). The five blocks are:

Block 1: *Student Background Characteristics*: gender, and family socialization (parents' education, generation in the U.S., primary language spoken at home)

Block 2: *Non-College Reference Group Influences*: peer group influence (race of 6 high school friends)

Block 3: *Personal Beliefs and Racial/Ethnic Identification:* self-interests, belief in the dominant ideology, extent of APA identity, and pre-tests of racial attitudes before college entry

Block 4: *Academic College Environment:* major, and exposure to university-sponsored diversity activities

Block 5: *Social College Environment:* Asian-ethnic group involvement, social interactions across race/ethnicity, and perceived climate for cross-race interaction.

Table A-2 in the appendix provides a complete listing of all the variables used in the multivariate analyses. Correlations of all independent variables on dependent variables were run to check for potential multicollinearity; the correlation of greatest magnitude was a moderate .34 (see Table A-3).

Results

Descriptive Analyses

Descriptive analyses reveal that Asian Pacific American students' attitudes toward affirmative action and the existence of discrimination in the U.S. differ significantly than those of their racial/ethnic peers. Table 1 shows differences in attitudes by students in four racial/ethnic groups toward two individual items representing different principles of affirmative action.[4] Interestingly, more APA students tended to agree that colleges do not have the responsibility to correct racial injustices after four years of college than in 1990. Yet, larger numbers of the same APA respondents tended to disagree with the notion that colleges should not provide resources to activities run by different groups of color in 1994 than in 1990. Meanwhile, African Americans voiced a more solidified support for both affirmative action principles after four years of college, while White/Caucasian students tended to solidify their opposition to both principles over the same period.

Insert Table 1 about here

Surprisingly, students from all four racial/ethnic groups voiced stronger support for

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[4] The exact correlate of the "Affirmative Action Principles" composite dependent variable could not be constructed for bivariate comparisons in this study, due to the fact that not all of the individual items that comprise this dependent variable were included on the base year (1990) instrument.

affirmative action practices after four years of college (see Table 2). Even the White/Caucasian students, who, on the whole, felt less likely to support affirmative action on principle in 1994, registered much stronger support (a 11.6 percentage point increase) for affirmative action practices in 1994 than in 1990. Yet, Asian Pacific American and White students' support for affirmative action in practice, even after four years in college, is still considerably lower than their support for affirmative action in principle.

Insert Table 2 about here

The discrepancy in the Asian Pacific American students' responses regarding the two affirmative action principles may be due in part to a self-interests standpoint: the APA students may feel that resources for educational, cultural, and social activities among student groups of color are warranted, since they themselves may be the recipients of such resources through the various Asian Pacific American ethnic students groups on campus. However, in principle, they still may believe that colleges do not necessarily have to bear the responsibility for racial injustices on the whole.

Once again, though, it is striking that a significant percentage of Asian Pacific American students changed their attitudes toward the support of affirmative action practices in 1994, since they also seem to feel that colleges do not need to address racial injustices. Perhaps these students believe that they themselves, or Asian Pacific Americans as a group, benefit by affirmative action practices. Or, it may be that APA students feel that as long as affirmative action is in place on college campuses, the policy should stay, despite the fact that it is not primarily higher education's responsibility to correct racial injustice.

Yet, if it is true that APA students do not feel that colleges must act responsively to combat racial injustice, it is not because they believe that the U.S. is no longer discriminatory or

unequal. Just as their racial/ethnic peers indicated, Asian Pacific American students--more so in 1994 than in 1990--believe that there exists discrimination and inequality in American society (see Table 3).

Insert Table 3 about here

What factors account for these subtle complexities in Asian Pacific American students' racial attitudes? Before moving to the multivariate analyses in order to address this question, it is important to remember that the term "Asian Pacific American" is an umbrella category that encompasses a heterogeneity of Asian ethnic heritages with dissimilar social histories in the U.S. With this in mind, chi-square distributions by Asian ethnic group were run to test whether or not Asian Pacific American respondents from different ethnic groups manifested different attitudes toward affirmative action and the prevalence of discrimination in this country. Unfortunately, since there were not enough Asian Pacific Americans in the 1994 survey wave to break apart into Asian ethnic sub-groups, the following analyses are based upon APA students' racial attitudes upon college entry in 1990.

Insert Table 4 about here

Only one dependent variable of the three (affirmative action principles, affirmative action practices, existence of discrimination/inequality) yielded significantly different results by Asian ethnic groups: attitudes toward affirmative action practices. While the majority of students in each Asian ethnic group tended to favor affirmative action practices, nearly half (42 percent) of Taiwanese Americans disagreed with such practices, which is more than double the percentage of

disagreement among most of the other Asian ethnic groups. On the other hand, Filipino Americans were the most likely to express "strong agreement" with affirmative action practices, but only slightly more than the other ethnic groups.

In comparing the background characteristics of APA students by ethnic group, it is of note that the majority of Taiwanese American students characterized their home neighborhoods as "all White," while only around 30 to 45 percent of Korean, Chinese, South Asian, and Filipino Americans reported hailing from "all White" communities. Given that the White/Caucasian students in this study registered the greatest opposition to affirmative action practices among the four racial/ethnic groups, the Taiwanese American students who grew up in all White neighborhoods may be reflecting the opinions of their high school peers.

Multivariate Analyses

In light of the inconsistencies of the descriptive findings, an examination into the influences behind Asian Pacific American students' racial attitudes becomes even more intriguing. Tables 5 and 6 show that some of the same constructs in the conceptual model bore significant relationships with APA students' attitudes toward both affirmative action *principles* and affirmative action *practices*. For example, APA students with negative perceptions of the campus racial climate were associated with support for both affirmative action principles and practices. In addition, Asian Pacific American social science majors tended to more strongly oppose both measures of affirmative action in comparison to the referent group--arts and humanities majors.

Other constructs only had significant meaning for one or the other aspect of affirmative action. While being female was a positive predictor for support for affirmative action *principles*, APA students with recent family immigration histories tended to support affirmative action *practices* in greater numbers than APA students whose families have been in the U.S. for a longer

period of time. In addition, both APA science/engineering and business majors tended to oppose affirmative action practices.

Insert Table 5 about here

Insert Table 6 about here

These results support previous findings that females are more supportive of affirmative action policies (Sax & Arredondo, 1996) than males. Moreover, although there is no empirical evidence of this phenomenon, one might speculate that first generation Asian Pacific Americans might support affirmative action more vigorously than subsequent generations because they are more likely to experience cultural and economic barriers since they are new to the country (Hune & Chan, 1997), and thus hope that they will be eligible for preferential treatment in order to overcome their temporary setbacks. Or, it may be that APA students who have lived in the U.S. for longer periods of time have heard about the allegations which claim that there exists quotas on the number of Asian Americans admitted to many elite colleges and universities due to increased numbers of spaces being reserved for underrepresented minorities, and thus oppose affirmative action due to self-interests.

Yet, it is important to remember that the overwhelming majority of Asian Pacific American students in this sample are the first generation to be born in the United States (approximately 60 percent), while a substantial 30 percent were foreign-born. Therefore, nearly all the APA students in this study have relatively recent immigration histories, as compared to other Asian Pacific Americans who are the fourth or fifth generation in their families to be born in the United States.

The relationship between negative perceptions of the racial climate and support for affirmative action can be inferred from past research on students of color, in that previous studies have determined independently that other minority students--namely African Americans and Latinos--tend to have negative opinions of their campuses' racial climates (Hurtado, 1992; Cabrera & Nora, 1994; McClelland & Auster, 1990), and also tend to be supportive of affirmative action policies (Sax & Arredondo, 1996). Likewise, these findings replicate other studies which have shown that students with business or science/engineering majors tend to show greater levels of disagreement with a range of racial attitudes (Astin, 1993; Muir, 1989).

Yet, the negative effect of having a social science major on affirmative action attitudes seems to somewhat contradict the literature, given that several studies reviewed in Pascarella & Terenzini (1991) found that social science majors tended to show the largest gains in terms of support for civil rights, which for some may also include support for affirmative action. However, these findings should be interpreted with caution. Because the referent category for the dichotomous measures that represented the various majors was "arts and humanities," the most accurate interpretation of the data is that Asian Pacific American social science majors are less likely to support affirmative action than arts and humanities majors. Indeed, bivariate analyses of the dependent variables by academic major reveal that greater percentages of APA arts and humanities majors tend to strongly support both affirmative action principles and practices (41 and 38 percent respectively "strongly agree"), while APA social science majors are more evenly distributed among supporters and opponents of both affirmative action measures.

Finally, exposure to University-sponsored diversity activities was found to be a positive predictor of support for affirmative action practices among Asian Pacific American students. Given that the descriptive statistics revealed that 11.6 percent of APA students went from opposing affirmative action practices in 1990 to supporting them in 1994, this finding may be the

one area in which higher education institutions--at least on this campus--have a proactive impact on the racial attitudes of Asian Pacific American students. Clearly, something happened during the four years that 11.6 percent of APA students spent in college which influenced them to change their minds about affirmative action practices. Perhaps their exposure to racial/ethnic diversity programming was one of the many keys that swayed their views.

Since support for and opposition to affirmative action by Asian Pacific American students seem to be influenced by somewhat similar factors, what, then, is the relationship between APA students' views toward affirmative action and their beliefs about American race relations? The answer seems to be: very similar. Asian Pacific American females and those students with negative perceptions of the campus racial climate were more likely to agree with the existence of discrimination or inequality in American society. Likewise, APA science/engineering, business, and social science majors were less likely to think that society is discriminatory or unequal (see Table 7).

Thus, the influences behind Asian Pacific American students' attitudes toward affirmative action and the factors which influence their views toward American race relations are similar. Interestingly, while APA students registered mixed support for both affirmative action measures (an applied context) in the descriptive analysis, they overwhelmingly tended to agree (96 percent) that discrimination and inequality exists in the U.S (a more general context). Yet, the differences in their racial attitudes in both the general and applied contexts were predicted by virtually the same constructs. This paradox only suggests that there is still much to be learned about the factors that influence Asian Pacific American students' racial attitudes, in both a "macro" and "micro" sense.

Insert Table 7 about here

Limitations of this Study

The most significant limitation of this study is the fact that it is a single-institution sample. Thus, all conclusions and implications drawn from the findings are only applicable to institutions of a similar type and nature to this large, public research university in the Midwest. Moreover, Asian Pacific Americans at this institution may be very distinct from APAs at other public research universities, such as those in the University of California system, where APA enrollments are greater than 30 to 50 percent. However, this limitation may actually be beneficial in studying diverse populations of Asian Pacific Americans, since the sparse literature on APA students' racial attitudes is either concentrated on the West Coast and/or Hawaii (e.g, Institute for the Study of Social Change, 1991; Fukurai, n.d.) or is broadly construed in national studies (e.g., Sax & Arredondo, 1996). Instead, this study illuminates how Asian Pacific American students away from the Western United States--who in this region may have very different ethnic and cultural backgrounds and immigration histories--view racial/ethnic diversity issues in higher education.

The second major limitation of this investigation pertains to the limited number of cases in the Asian Pacific American sample. The low number of cases in the 1990 and 1994 longitudinal sample (n=184) greatly limited the number of constructs that could have been included in the full conceptual model and posed restrictions on the types of quantitative analyses that could have been used in conjunction with this sample. In addition, small Asian ethnic group sample sizes prevented their inclusion in the full longitudinal conceptual model. Yet, nearly all of the previous racial attitude studies conducted on Asian Pacific Americans have involved a small qualitative sample at a single institution. This study was one of the first to test significant relationships among APA students and their racial attitudes in a quantitative analysis, and it assisted our

understanding on how some of the findings from the smaller, qualitative studies were applicable or inappropriate for a broader--albeit limited--APA population.

Implications for Future Research

The results of this study present significant implications for future research. The original concept behind this study was to develop an inclusive theoretical model that incorporated research and theory from several disciplines in order to ascertain which, if any, were applicable in the study of influences on Asian Pacific American students' racial attitudes. Thus, the non-significant findings from the multivariate analyses are just as telling as the significant ones. For example, none of the social science theories (e.g., self-interests, dominant ideology, racial identity) were found to be significant predictors of any of the three racial attitudes tested. Yet, some of these theories have been tested and validated several times over the past three decades in sociological and psychological studies of both Black and White Americans (e.g., Bobo, 1983; Kluegel & Smith, 1985; Bobo & Kluegel, 1993; etc.).

Perhaps what these findings indicate is the need for a new approach in the study of racial attitudes. While past research has focused primarily upon the attitudes of White and African Americans due to the Black-White paradigm that dominates this field of research (Schumann, Steeh & Bobo, 1985), the increasingly multicultural reality that awaits in the 21st century requires that traditional paradigms be broadened to include the perspectives of diverse American communities. With ever increasing Asian Pacific American enrollments in U.S. colleges and universities, that reality has already taken hold in higher education and demands further study. Thus, in order to advance scholarship on the factors behind Asian Pacific Americans' racial attitudes, a more inductive research approach may be more suitable. Instead of relying on theory developed for other American racial/ethnic groups and/or stereotypes about Asian Pacific

Americans such as the "model minority," the next step in Asian Pacific American racial attitude research should be a more exploratory, grounded theory approach in which Asian Pacific Americans themselves serve as their own agents of explanation in this new field of study.

Implications for Practice

The findings of the multivariate analyses offer several starting points of consideration for higher education practitioners. First, it seems that--in terms of areas of a student's college experiences that are under the direct control of the institution--for Asian Pacific American students, curricular activities are of significant influence on APA students' racial attitudes. Certain majors, such as business, science, engineering, and in one case, social science, have been identified as inversely related to agreement with three racial attitude measures. Although it should not be the goal of higher education institutions to force APA students into other majors for the purposes of social engineering, practitioners should keep in mind that, for this racial/ethnic group, academic programs may be one of the most effective ways to reach APA students. It bears repeating that University-sponsored programs, which are not necessarily part of any core curriculum, were also found to be positive predictors of APA students' racial attitudes for the Asian Pacific American sample in this study. Future academic programming concerning racial/ethnic diversity issues should strive to be more inclusive of APA perspectives, given the potential curricular programming may have on affecting the racial attitudes of Asian Pacific American students.

Finally, the lack of significant findings regarding any construct related to inter-group contact in this study should force academic and student affairs professionals to re-think the perceived truism that "inter-group contact is always good for positive inter-racial relations." Just as Allport reminds his readers in his 1954 classic, *The Nature of Prejudice*, inter-group contact for the sake of contact may not necessarily be effective in reducing racial stereotypes. Instead,

Allport warns that in order for inter-racial contact to work in dispelling the negative stereotypes that drive racial prejudice, the contact must be made under certain conditions. Some of these conditions include but are not limited to: the willingness of all participants to engage in inter-racial contact, the assurance that the opinions of all the participants must be considered of equal merit, and the provision that the participants share similar values and beliefs (Allport, 1954).

Thus, in order for higher education institutions to be successful in fostering a heightened racial awareness and acceptance of diversity in their students, they must address, understand, and value the basis for all their students' views. Colleges cannot be effective in institutional planning, policy, and programming with regard to diversity until the perspectives of a diverse set of constituencies are examined and not assumed. Since Asian Pacific Americans are becoming an increasingly larger portion of enrollment in higher education, their views are pivotal in this process. This study represents an initial attempt to understand the Asian Pacific American perspective and to make "visible" the contributions APA students bring to the racial discourse on today's college campuses.

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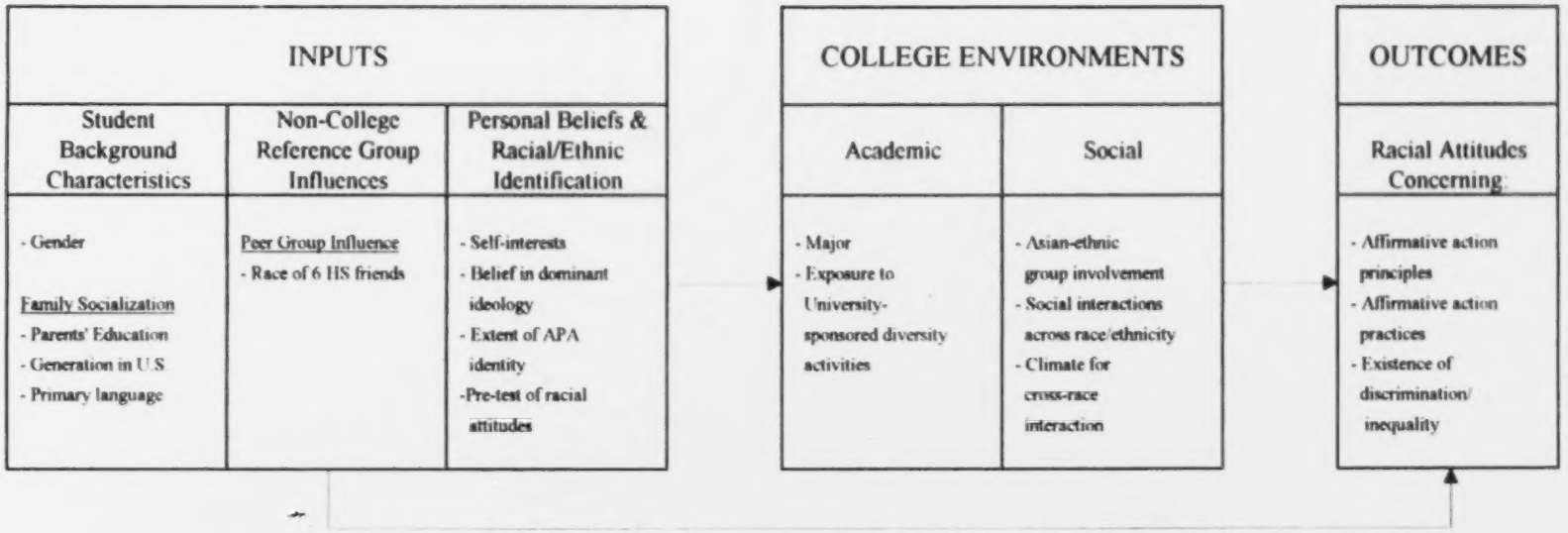


Figure 1.
Full Conceptual Model to Study the Impact of Personal and College Influences on Asian Pacific American Students' Racial Attitudes

Table 1
Students' changes in support for affirmative action *principles* by racial/ethnic group *

Statement: "Despite our concern over racial injustice, colleges and universities do not have a primary responsibility to correct the situation."

	In 1990	In 1994	% Change	Chi-Square
Asian Pacific American				
Agree	21.5	22.2	+0.7	Among racial/ethnic
Disagree	78.5	77.8		groups in 1990:
				χ^2=53.2; *df*=5; p≤.001
White/Caucasian				
Agree	38.0	38.9	+0.9	Among racial/ethnic
Disagree	62.0	61.1		groups in 1994:
				χ^2=82.1; *df*=5; p≤.001
Black/African American				
Agree	18.7	10.6	-8.1	
Disagree	81.3	89.4		
Hispanic/Latino				
Agree	23.0	22.5	-0.5	
Disagree	77.0	77.5		

Statement: "Colleges and universities should not provide resources to support educational, cultural, and social activities run by different groups of color."

	In 1990	In 1994	% Change	Chi-Square
Asian Pacific American				
Agree	4.8	2.0	-2.8	Among racial/ethnic
Disagree	95.2	98.0		groups in 1990:
				χ^2=20.4; *df*=5; p≤.001
White/Caucasian				
Agree	12.4	16.7		Among racial/ethnic
Disagree	87.6	83.3	+4.3	groups in 1994:
				χ^2=64.6; *df*=5; p≤.001
Black/African American				
Agree	7.2	2.1	-5.1	
Disagree	92.8	97.9		
Hispanic/Latino				
Agree	7.1	10.1	+3.0	
Disagree	92.9	89.9		

* Native American students are not included in the analyses due to insufficient sample size.

Table 2
Students' changes in support for affirmative action *practices by racial/ethnic group****

	In 1990	In 1994	% Change	Chi-Square
Asian Pacific American				
Agree	48.1	59.7	+11.6	Among racial/ethnic
Disagree	51.9	40.3		groups in 1990:
				χ^2=296.4; *df*=5; p≤.001
White/Caucasian				
Agree	17.7	29.3	+11.6	Among racial/ethnic
Disagree	82.3	70.7		groups in 1994:
				χ^2=266.7; *df*=5; p≤.001
Black/African American				
Agree	93.5	98.7	+5.2	
Disagree	6.5	1.3		
Hispanic/Latino				
Agree	64.1	74.6	+10.5	
Disagree	35.9	25.4		

* The construct is represented by a composite variable; see Table A-1 in the appendix for specifications.

** Native Americans are not included in the analyses due to insufficient sample size.

Table 3
Students' changes in beliefs about the existence of discrimination or inequality in the U. S.* by racial/ethnic group**

	In 1990	In 1994	% Change	Chi-Square
Asian Pacific American				
Agree	90.6	95.8	+5.2	Among racial/ethnic
Disagree	9.4	4.2		groups in 1990:
				χ^2=37.1; *df*=5; p≤.001
White/Caucasian				
Agree	74.8	81.8	+7.0	Among racial/ethnic
Disagree	25.2	18.2		groups in 1994:
				χ^2=47.2; *df*=5; p≤.001
Black/African American				
Agree	98.7	99.4	+0.7	
Disagree	1.3	0.6		
Hispanic/Latino				
Agree	89.5	92.3	+2.8	
Disagree	10.5	7.7		

* The construct is represented by a composite variable; see Table A-1 in the appendix for specifications.

** Native Americans are not included in the analyses due to insufficient sample size.

Table 4
Asian Pacific American students' attitudes toward affirmative action *practices* * by Asian ethnic group as first-year students**

	Strongly Agree	Agree	Disagree	Strongly Disagree
South Asian American (n=65)	10.8	67.7	21.5	0.0
Korean American (n=47)	2.1	76.6	21.3	0.0
Chinese American (n=41)	12.2	75.6	12.2	0.0
Filipino American (n=32)	18.8	65.6	15.6	0.0
Taiwanese American (n=26)	3.8	53.8	42.3	0.0
Other/No specification (n=51)	13.7	64.7	19.6	2.0

* The construct is represented by a composite variable; see Table A-1 in the appendix for specifications.

** Japanese Americans and Vietnamese Americans removed from the analysis due to insufficient sample sizes.

Table 5
Predictors of Asian Pacific American students' attitudes toward *principles* of affirmative action in higher education institutions

Item	Block 1	Block 2	Block 3	Block 4	Block 5
Gender (female)	.34 ***	.33 ***	.30 ***	.27 ***	.29 ***
Parents' education level	-.01	-.01	-.05	-.06	-.01
Generation status in U.S.	-.01	-.08	-.10	-.10	-.09
Primary language (not English)	.01	.01	.04	.01	-.01
HS friends mostly people of color		-.01	.01	.02	.01
HS friends mostly APA		-.05	-.05	-.04	-.05
Self interests: U-M was 1st choice			.00	-.02	.01
Belief in dominant ideology			-.06	-.06	-.06
Extent to which think about being APA			.04	.05	.00
Pre-test 1			.13	.12	.08
Pre-test 2			.26 ***	.27 ***	.28 ***
Major: science and engineering				-.21 *	-.13
Major: social science				-.22 *	-.21 *
Major: business				-.08	-.04
Exposed to Univ.-sponsored diversity activities				.07	-.09
Involvement in APA ethnic student groups				-.15	.11
Positive interactions across race/ethnicity				-.04	-.13
Positive perception of racial climate				.07	-.15 ***
R-square	.12	.12	.22	.26	.31
Significance F	.00	.00	.00	.00	.00

Note: * p < .1; ** p < .01; *** p < .001

Table 6
Predictors of Asian Pacific American students' attitudes toward *practices* of affirmative action in higher education institutions

Item	Block 1	Block 2	Block 3	Block 4	Block 5
Gender (female)	.10	.10	.14 *	.10	.09
Parents' education level	.06	.06	.06	.06	.08
Generation status in U.S.	-.18 *	-.16 *	-.18 *	-.16 *	-.15 *
Primary language (not English)	.06	.07	.09	.06	.02
HS friends mostly people of color		.06	.03	.04	.06
HS friends mostly APA		-.10	-.10	-.09	-.09
Self interests: U-M was 1st choice			.05	.02	.03
Belief in dominant ideology			.01	.00	-.01
Extent to which think about being APA			.07	.07	.01
Pre-test			.31 ***	.30 ***	.31 ***
Major: science and engineering				-.29 **	-.20 *
Major: social science				-.28 **	-.27 **
Major: business				-.23 **	-.20 **
Exposed to Univ.-sponsored diversity activities				.14 *	.14 *
Involvement in APA ethnic student groups					.09
Positive interactions across race/ethnicity					.01
Positive perception of racial climate					-.23 **
R-square	.05	.06	.17	.28	.33
Significance	.10	.12	.00	.00	.00

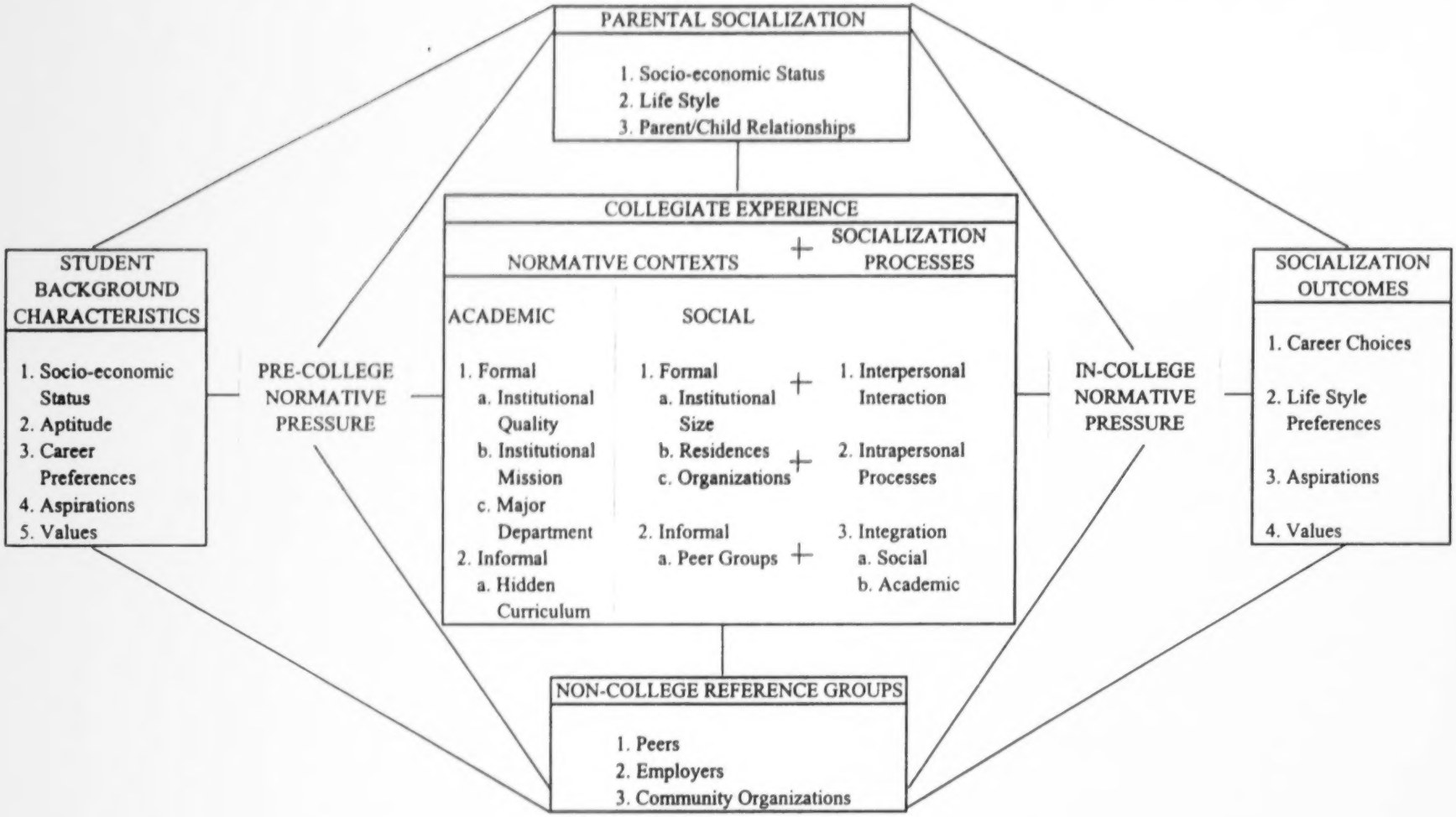
Note: * $p \leq .1$; ** $p \leq .01$; *** $p \leq .001$

Table 7
Predictors of Asian Pacific American students' attitudes toward the existence of discrimination or inequality in American society

Item	Block 1	Block 2	Block 3	Block 4	Block 5
Gender (female)	.22 **	.22 **	.23 **	.21 **	.21 **
Parents' education level	.07	.07	.04	.03	.05
Generation status in U.S.	-.11	-.11	-.13	-.10	-.09
Primary language (not English)	-.01	-.02	-.05	-.11	-.08
HS friends mostly people of color		-.07	-.07	-.06	-.06
HS friends mostly APA		.01	.00	.00	.02
Self interests: U-M was 1st choice			.04	.06	.06
Belief in dominant ideology			.01	.00	.02
Extent to which think about being APA			.04	.06	.06
Pre-test			.27 ***	.28 ***	.24 ***
Major: science and engineering				-.42 ***	-.33 ***
Major: social science				-.36 ***	-.33 ***
Major: business				-.15 *	-.12 *
Exposed to Univ.-sponsored diversity activities				-.08	-.02
Involvement in APA ethnic student groups					-.10
Positive interactions across race/ethnicity					-.03
Positive perception of racial climate					-.20 **
R-square	.07	.07	.15	.27	.32
Significance	.03	.07	.01	.00	.00

Note: * $p \leq .1$; ** $p \leq .01$; *** $p \leq .001$

APPENDIX



Source: Weidman, J. (1989). Undergraduate socialization: A conceptual approach. In J. Smart (Ed.), Higher education: Handbook of theory and research (Vol. 5). New York: Agathon.

Figure A-1.
Weidman's (1989) Conceptual Model of Undergraduate Socialization

Table A-1
Summary statistics for factor scales in the conceptual model

Scale description and individual items	Survey Wave	Variable Name	Factor Loadings	Alpha Reliabilities
DEPENDENT VARIABLES				
Affirmative Action Principles				.675
Continued racial and ethnic discrimination within higher education requires that universities aggressively remove institutional barriers that promote inequality	1994	RV19N *	.611	
By including multicultural perspectives in the curriculum, universities are fulfilling the real purpose of higher education	1994	RV19M *	.578	
Colleges and universities should not provide resources to support educational, cultural, and social activities run by different groups of color	1994	RV19I	.550	
Despite our concern over racial injustice, colleges and universities do not have a primary responsibility to correct the situation	1994	RV19B	.440	
Affirmative Action Practices				.759
Different admissions criteria with respect to SAT and ACT scores may be justified for some students of color	1994	RV19C *	.788	
A high priority should be given to see that students of color receive financial aid for education after high school	1994	RV19G *	.693	
In the long run, a greatly increased enrollment of students of color will enhance the excellence of universities	1994	RV19A *	.681	
The hiring of more faculty of color should be a top priority of this University	1994	RV19K *	.542	
Existence of Discrimination/Inequality				.756
Most people of color are no longer discriminated against in this country	1994	RV48_2D	.743	
A person's racial background in this society does not interfere with achieving everything he or she wants to achieve	1994	RV48_2F	.717	
In the generation since the Civil Rights Movement, our society has done enough to promote the welfare of people of color	1994	RV48_2C	.717	
Anti-Semitism in America is a thing of the past	1994	RV48_2B	.673	
The system prevents people of color from getting their fair share of the good things in life, such as better jobs and more money	1994	RV48_2E *	.604	
In the United States, there are still great differences between social levels--what one can achieve in life depends mainly on one's family background	1994	RV48_2A *	.555	

Table A-1 (continued)
Summary statistics for factor scales in the conceptual model

Scale description and individual items	Survey Wave	Variable Name	Factor Loadings	Alpha Reliabilities
INDEPENDENT VARIABLES				
Belief in the Dominant Ideology				.801
Wealth is attributable to hard work and initiative	1990	V62IIB	.894	
Wealth is attributable to personal drive and willingness to take risks	1990	V62IID	.888	
Pre-test for: Affirmative Action Practices				.653
Different admissions criteria with respect to SAT and ACT scores may be justified for some students of color	1990	V48C	N/A	
A high priority should be given to see that students of color receive financial aid for education after high school	1990	V48F	N/A	
In the long run, a greatly increased enrollment of students of color will enhance the excellence of universities	1990	V48A	N/A	
The hiring of more faculty of color should be a top priority of this University	1990	V48H	N/A	
Pre-test for: Existence of Discrimination/Inequality				.687
Most people of color are no longer discriminated against in this country	1990	V61IID	N/A	
A person's racial background in this society does not interfere with achieving everything he or she wants to achieve	1990	V61IIJ	N/A	
In the generation since the Civil Rights Movement, our society has done enough to promote the welfare of people of color	1990	V61IIE	N/A	
Anti-Semitism in America is a thing of the past	1990	V61III	N/A	
The system prevents people of color from getting their fair share of the good things in life, such as better jobs and more money	1990	V61IIG *	N/A	
In the United States, there are still great differences between social levels--what one can achieve in life depends mainly on one's family background	1990	V61IIA *	N/A	
Exposure to University-Sponsored Diversity Activities				.671
Exposed to diversity through other University programs and activities	1994	RV29B	.802	
Exposed to diversity through specific courses, readings, lectures, and discussions	1994	RV29A	.784	
Exposed to diversity in interactions and conversations with friends	1994	RV29C	.745	

Table A-1 (continued)
Summary statistics for factor scales in the conceptual model

Scale description and individual items	Survey Wave	Variable Name	Factor Loadings	Alpha Reliabilities
Social Interactions Across Race/Ethnicity				.879
Had intellectual discussions outside of class with member(s) of another racial/ethnic group	1994	RV24E	.857	
Shared personal feelings and problems with member(s) of another racial/ethnic group	1994	RV24F	.848	
Attended social events with member(s) of another racial/ethnic group	1994	RV24D	.818	
Studied with member(s) of another racial/ethnic group	1994	RV24A	.710	
Had meaningful and honest discussions about race and/or ethnic relations outside of class with member(s) of another racial/ethnic group	1994	RV24B	.670	
Participated in extracurricular activities with member(s) of another racial/ethnic group	1994	RV24G	.567	
Climate for Cross-Race Interactions				.764
Extent of friendships between students of color and White students at U-M	1994	RV20E	.853	
Extent of interaction between students or color and White students at U-M	1994	RV20I	.779	
Extent of dating between students of color and White students at U-M	1994	RV20C	.598	
Extent of trust and respect between students in different groups of color at U-M	1994	RV20H	.440	
Extent of relationships and experiences among different racial/ethnic groups that promote in-depth learning from each other at U-M	1994	RV20K	.405	

* These items were reverse coded:
RV19N, RV19M, RV19C RV19G RV19A RV19K: 1 = strongly disagree to 4 = strongly agree
RV48_2E, RV48_2A: 1 = strongly disagree to 4 = strongly agree
V61IID, V61IIJ, V61IIE, V61III: 1 = strongly disagree to 4 = strongly agree

Table A-2
Description of measures utilized in the multivariate analyses

Item	Mean	Std. Dev	Survey Wave	Coding
Independent variables				
Gender	1.50	0.50	1990	1=male; 2=female
Parents' education level	11.11	2.34	1990	Index of father's and mother's educational attainment
Generation status in U.S.	1.63	0.64	1994	Recoded to 1=1st generation; 2=2nd generation; 3=3rd generation
Primary language	1.41	0.49	1994	Recoded to 1=English; 2=not English
HS friends mostly people of color	1.11	0.31	1990	Recoded to 1=no; 2=yes
HS friends mostly APA	1.30	0.46	1990	Recoded to 1=no; 2=yes
(HS friends mostly White is referent category)				
Self interests: U-M was 1st choice	3.27	0.95	1990	Reverse coded to 1=4th or lower; 2=3rd; 3=2nd; 4=1st
Belief in dominant ideology	5.18	0.94	1990	Index with range of 3-6, with high value indicating strong belief
Extent to which think about being APA	2.22	0.85	1990	Reverse coded to 1=hardly ever; 2=once in a while; 3=fairly often; 4=a lot
Pre-tests:				
1) Colleges should not provide resources to activities students of color	1.58	0.61	1990	1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree
2) Colleges not responsible to correct social injustice	1.89	0.74	1990	1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree
3) Affirmative action practices	9.87	1.99	1990	Index with range of 4-16, with high value indicating strong agreement
4) Belief in existence of discrimination/inequality	12.84	2.42	1990	Index with range of 6-24, with high value indicating strong agreement
Major: science and engineering	1.53	0.50	1994	Recoded to 1=no; 2=yes
Major: social science	1.21	0.41	1994	Recoded to 1=no; 2=yes
Major: business	1.03	0.16	1994	Recoded to 1=no; 2=yes
(Major: arts & humanities is referent category)				
Exposed to Univ.-sponsored diversity activities	8.84	2.52	1994	Index with range of 3-15, with high value indicating a great deal

Table A-2 (continued)
Description of measures utilized in the multivariate analyses

Item	Mean	Std. Dev	Survey Wave	Coding
Independent variables (continued)				
Involvement in APA ethnic student groups	2.15	1.07	1994	1=not at all involved; 2=slightly involved; 3=somewhat involved; 4=substantially involved
Positive interactions across race/ethnicity	23.32	5.38	1994	Index with range of 10-30, with high value indicating substantial positive interaction
Positive perception of racial climate	12.18	2.68	1994	Index with range of 5-20, with high value indicating perceptual climate with high cross-race interaction
Dependent variables				
Attitudes toward affirmative action principles	12.50	1.99	1994	Index with range of 4-16, with high value indicating strong agreement
Attitudes toward affirmative action practices	10.28	2.57	1994	Index with range of 4-15, with high value indicating strong agreement
Belief that U.S. society is discriminatory/unequal	17.98	3.03	1994	Index with range of 6-20, with high value indicating strong agreement

Note: Description of index measures can be found in Table A-1.

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Table A-3
Correlations of measures utilized in the multivariate analyses.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. Gender																							
2. Parents' education level	.17																						
3. Generation status in U.S.																							
4. Primary language			-.16																				
5. HS friends mostly people of color																							
6. HS friends mostly APA					-.23																		
7. Self interests: U-M was 1st choice	-.16																						
8. Belief in dominant ideology																							
9. Extent think about being APA			.22			.19																	
10. Colleges not provide resources	-.15	-.15							-.14														
11. College not responsible injustice										.17													
12. Affirmative action practices									.15	-.16	-.27												
13. Belief in existence of discrimin.								.18	-.14	.22	.25	-.33											
14. Major: science and engineering	-.30																						
15. Major: social science	.20		-.15											-.55									
16. Major: business														-.18									
17. Exposed to diversity activities	.25									-.21				-.17									
18. APA ethnic student groups inv.				.22		.19			.33								.21						
19. Pos. interactions across race						-.17											.31						
20. Pos. perception of racial climate													.16	.25					.28				
21. DV: affirmative action principles	.32									-.22	-.32		-.14	-.21			.23	.16		-.20			
22. DV: affirmative action practices			-.16								-.23	.32	-.17	-.21			.29	.14		-.22	.60		
23. DV: Believe society discriminatory	.24										-.25		-.30	-.28						-.27		.48	

Note: For all printed values $p \leq .05$

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